11.6% vs 11.2%; M: 9.1% and 8.8% vs 8.4%; NE: 5% and 4.7% vs 4.3%). When others such as the East South Central and the West South central regions were found in a higher proportion among the good, fair and poor health groups (ESC: 5.8%, 6.7% and 9.6% against 5.6% WSC: 13.6%, 13.4% and 15.6% vs 12.5%). The coefficients found in the ordered logit model were all significant and have confirmed the descriptive study. **CONCLUSIONS:** The location influences the way people perceive their health in the US. Next step would be to look at other socio-demographics variables such as people's revenue, race or education.

PIH55
A COMPARISON OF VALUE FOR HEALTH STATES WORSE THAN DEAD BETWEEN JAPAN AND UK
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OBJECTIVES: To clarify the difference of value for health states worse than dead (WTD) between Japan and UK. **METHODS:** A web survey was conducted asking respondents whether each health states is WTD before discrete choice experiment (DCE) tasks (DCE results not described). Health states were described using the EQ-5D-3L descriptive system. The 48 health states were blocked into 24 sets for DCE tasks. All respondents were asked 12 sets tasks randomly. We compared value for WTD between Japan and UK, UK's value referred the article (Bansback et al., 2011). **RESULTS:** A sample of 1242 members of the market research panel was invited by email to participate in the survey. Of these, 1085 (87%) completed all tasks. The mean age of participants were 49.5 years (SD=16.6). High numbers of value of WTD were confirmed. 50.5% of respondents judged health state 33333 to be value of WTD, but 77.0% judged in UK. Similarly, 45.7% and 41.0% of them judged to be value of WTD for health state 33332 and 33323, respectively (72.0% and 60.0% in UK). **CONCLUSIONS:** Our findings suggest that Japanese value of worse health states not to be low in comparison with UK's. On the other hand, it was thought that participants might not understand the tasks.

PIH56
PATIENT-REPORTED FALL RELATED HEALTH CARE SERVICES IN ELDERLY WOMEN
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OBJECTIVES: Although the falls in elderly people lead to serious health consequences, the economic burden is underestimated. The aim of this study was to examine the fall-related out-patient medical care in community-dwelling elderly women. **METHODS:** Women aged 65 years and older who visited National Osteoporosis Center for diagnostic or treatment procedures, were interviewed by phone recording the consequences and health care procedures related to every fall sustained during the previous 12 months. **RESULTS:** The study population consisted of 310 women who reported one or more fall, one in three of them had fallen twice or more. Of all women who fell, 280 (90.3%) reported their fall resulted in an injury, and 77 (15.3%) falls led to bone fractures. Fall related medical care was provided to 135 women: to 43.5% of those who fell and 48.2% of those who sustained injuries from falling received medical attention. Among these, the highest percentage reported using of out-patient medical services. The number of out-patient visits reported (535 visits in total) ranged from 1 to 13, and in 70 cases (51.9%) – from 2 to 4 visits. Different types of out-patient health care were used by 43.5% of women who fell. The majority of specialists visited were orthopaedist, surgeon, and radiologist. An ambulance was used by 11.9%, and family doctor was visited by 19.4% of fallers. The mean number of health care procedures was higher in women who sustained a fracture, as compared to those who did not: 4.9 (95% CI 4.4–5.4) and 0.67 (95% CI 0.29–0.76), respectively; p<0.0001. **CONCLUSIONS:** From all self-reported falls registered in women over 65 years, 90.3% resulted in any injuries. The mean number of out-patient visits per faller was 1.73 (95 % CI 1.36–2.1).

PIH57
LONG-TERM GRADING OF HEALTH-RELATED QUALITY OF LIFE OF CARE-NEEDED ELDERLY: A 2-YR FOLLOW-UP STUDY
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OBJECTIVES: To assess the long-term grading of health-related quality of life (HRQL) of care-needed elderly who had received the occupational therapy in Japan. **METHODS:** We carried out a 2-year follow-up study of multicenter trial. The subjects were recruited from 26 nursing homes in Japan. The proxy of the subjects completed a questionnaire of the Health Utilities Index Mark3 (HUI3). We tested the long-term effect of occupational therapy and aged natural grading of care-needed elderly. **RESULTS:** 55 male and 85 female subjects remained at final follow-up. The mean age of subjects was 76.9 years. The global score of HUI3 of baseline was 0.377 (SD=0.270). Their score was improved for three month (mean score=0.418, SD=0.284), but had deteriorated to 0.328 (SD=0.324) 2-year later. Speech, Ambulation, Emotion and Cognition had deteriorated significantly among 8 attributes of HUI3. In regression analysis, higher care level significantly increased risk of deteriorating HRQL of care-needed elderly. **CONCLUSIONS:** Our findings suggest that occupational therapy have short-term effect for care-needed elderly. However, we cannot affirm that that occupational therapy has long-term effect. The aging may deteriorate their HRQL of care-needed elderly naturally.

PIH58
DIFFERENTIAL ITEM FUNCTIONING AND THE EQ-5D: EVIDENCE FROM THE UK HOSPITAL EPISODE STATISTICS
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OBJECTIVES: The EuroQol-5D (EQ-5D) is a generic patient-reported outcome measure (PROM) allowing comparisons to be made across different diseases and conditions. The instrument has been used in the UK's National Health Service (NHS) since 2009 to collect data from patients to assess the effectiveness of a number of surgical interventions. The aim of this study was to investigate whether the EQ-5D domains behave similarly across patient samples. **METHODS:** The data were derived from published Hospital Episode Statistics (HES) for April 2013 to March 2013. The EQ-5D had been completed by patients undergoing four surgical procedures: groin hernia repair (N=21831), hip (N=37800) and knee replacement (N=40429) and varicose vein repair (N=4681). The partial credit model (Masters, 1982) was applied to the data. Uniform differential item functioning (DIF) and non-uniform DIF (criterion difference > 0.5 logits) was assessed across the four interventions, gender, age group and the interactions. **RESULTS:** There was significant uniform DIF between the 4 interventions with 50% of all possible contrasts demonstrating DIF. The only domain not affected by DIF was Discomfort/Pain. There was DIF present in 2/3 of the contrasts for Anxiety/Depression, Mobility and Self-care and in 50% of the Usual Activities domain. DIF was also demonstrated across age groups for the Mobility and Anxiety/Depression domains. No DIF was found for gender. Finally, non-uniform DIF was demonstrated for age group by intervention. The Mobility domain showed the greatest degree of non-uniform DIF (20/24, 83% of the contrasts). **CONCLUSIONS:** The finding that the EQ-5D performs differentially depending on the patient group is an important one and means that the instrument should be used cautiously when comparisons across different surgical interventions are being made. This has potentially major ramifications for the use of the instrument as a measure of efficacy in the NHS.

PIH59
ANTENATAL DEPRESSION AND ITS RISK FACTORS AMONG WOMEN IN CHENGDU OF CHINA RESULTS FROM A HOSPITAL BASED SURVEY
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OBJECTIVES: Mental health of pregnant women is essential for maternal and neonatal health. However, there is lack of statistics of antenatal depression in China. The study aimed to investigate the prevalence of antenatal depression and explore its risk factors among pregnant women in Chengdu of China. **METHODS:** Women at third trimester of pregnancy were screened for symptoms of depression at antenatal clinics of West China Second Hospital between 28 October 2013 to 28 February 2014 based on the Chinese version of the Edinburgh Postnatal Depression Scale (EPDS) and a psychosocial risk factors checklist. **RESULTS:** A total of 2243 pregnant women aged 30.0±4.0 years participated in the survey. The mean EPDS score was 8.43 (standard deviation: 3.97). With a threshold score of 13, 14.2% were screened as having symptoms of depression. Age (P=0.007), education level (P<0.001), occupation (P=0.001), number of children (including the fetus) (P=0.018), number of miscarriage/abortion (P=0.048), and age of first pregnancy (P=0.001) were associated with antenatal depression in univariable analysis but not multivariable analysis (P>0.05 for all). Women who were dissatisfied with living conditions (OR=1.81; 95% CI: 1.38-2.38), had a poor relationship with mother-in-law relationship (OR=2.20; 95% CI: 1.65-2.92), and had unplanned pregnancy (OR=1.34, 95% CI: 1.02-1.76) were more likely to show antenatal depression symptoms. **CONCLUSIONS:** Our study shows antenatal depression might be prevalent among Chinese women in Chengdu. Early detection and intervention for antenatal depression may be necessitated to improve maternal and neonatal health after more systematic studies and reliable data are available.

PIH60
DISUTILITY ASSOCIATED WITH ERECTILE DYSFUNCTION IN THE MIDDLE-AGED OR OLDER MALES
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OBJECTIVES: Erectile dysfunction (ED) affects millions of males world-wide. While it is obvious that ED affects individuals Quality of Life, the quantifiable data on disutility associated with ED is still lacking. Moreover, the health utility – impact has not been studied using multiple health utility instruments previously. Our aim was to quantify the disutility caused by different levels of ED using two preference-based health utility indices simultaneously. **METHODS:** A total of362 middle-aged or older (52-75 year old) males responded to the five-item International Index of Erectile Function (IIEF-5) in the cross-sectional sample of Savitaipale Study in 2007-2008. The lower score in IIEF-5 (range 1-25) corresponds to more severe ED. Health utility was assessed with two separate validated preference-based instruments, 15D and SF-6D. Data were adjusted for age, number of morbidities and marital status. Minimally important differences (0.02-0.03 for 15D and 0.04 for SF-6D) were used to guide the clinical interpration of the results. **RESULTS:** Both 15D and SF-6D were significantly correlated with IIEF-5 (p<0.001). When examining the ED categorically, the adjusted marginal disutility (0.023 in 15D and 0.038 in SF-6D) was statistically significant (p<0.05) and clinically noticiable even at the mild ED (IIEF-5 score of 22-25). The marginal disutility progressively increased with increasing level of dysfunction, and was highest among the males who had not had sexual activity in past 6 months (0.060 in 15D and 0.093 in SF-6D, p<0.001 on both). On average, a one point decrease in IIEF-5 corresponded to a 0.003 decrease in 15D (p<0.001) and 0.004 in SF-6D (p<0.001). **CONCLUSIONS:** Erectile dysfunction can cause a substantial disutility on males. While this condition may not be life treathening or is not considered a major public health problem societally, the marginal disutility associated with severe ED is comparable or even greater than disutility associated with many chronic morbidities.

PIH61
REFERENCE EQ-5D-3L AND EQ-5D-5L DATA FROM THE ITALIAN GENERAL POPULATION
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OBJECTIVES: No recent Italian norm EQ-5D data were available. Furthermore, norm data from the new descriptive system with 5 levels were completely missing. The main objective of the present study was to assess an Italian general population reference data using both the standard EQ-5D-3L version and the recently introduced EQ-5D-5L. **METHODS:** Large-scale telephone survey was conducted in November 2013 on 6,800 subjects from the general population of the Lombardy region, with 9.8 million residents. They were recruited to be representative of the Lombardy general adult population as regards age (from 18 years), gender and geographical distribution. Each participant underwent a telephone interview including the Italian version of the 5L and 3L descriptive system, then, to minimize memory effects, between the two descriptive systems the participants were asked to report their socio-demographic data, and finally they answered the question on the visual analogue scale (VAS). The data collected with the 3L and 5L version descriptive system were converted into utilities. **RESULTS:** Participants were 48% male with a mean (SE) age of 51.9 (0.21). Around half (51.3%) of the participants specified they have a paid or unpaid work, 15.8% were housewives, 6.2% students were, 5.3% idles and 26.5% retired. Overall no problems were reported by 86.5% (3L) and 84.2% (5L) with mobility, by 96.1% (3L) and 94.2% (5L) with self-care, by 88.0% (3L) and 84.9% (5L) with usual activities, by 58.4% (3L) and 52.8% (5L) with pain/discomfort, and by 66.5% (3L) and 61.7% (5L) with anxiety/depression. The mean (standard error) and median VAS was 78.2 (0.2) and 80. Mean (SE) utility index obtained from both the 3L and the 5L versions was 0.915 (0.001). **CONCLUSIONS:** Reference EQ-5D-3L and EQ-5D-5L data on the Italian general adult population are now available. Although these data were collected in the Lombardy region we can consider our results a good proxy of the full Country.

PIH62

PATIENT PREFERENCES: PRO MIXED MODES – EPRO VERSUS PAPER

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OBJECTIVES: This presentation expands on a previous ISPOR presentation on patient acceptance of the use of Mixed Modes for collecting PROs in trials. The ISPOR PRO Mixed Modes task force recommends when mixing modes to avoid mixing paper with ePRO. However, interest in using paper for PRO collection still exists. This presentation will investigate survey data to examine if patients prefer ePRO over paper. **METHODS:** The research (conducted in 2013) includes patients globally (N=405) who participated in at least one clinical trial requiring patient diaries in the past two years. Patients were asked about previous diary experiences and future trial participation. The previous presentation showed most patients are in favor of mixed modes–mainly due to being able to choose their preferred mode. This presentation focuses on patients with prior experiences with both paper and ePRO (N=167). **RESULTS:** Of paper/ePRO experienced patients, 77.3% preferred ePRO; 76.1% had high agreement that ePRO makes dairy participation easier; 73.1% had high agreement that ePRO-use makes them more willing to participate in future diaries. Of patients who prefer ePRO, those who used ePRO in their most recent trial had significantly higher satisfaction ratings (87.0%) than those who used paper (55.2%), p<0.001. Low agreement ratings were associated with dissatisfaction and longer times per diary entry. **CONCLUSIONS:** These findings show most patients prefer ePRO and satisfaction rates are higher when patients use their preferred ePRO mode. Sponsors should consider using ePRO due to patient preference, as higher satisfaction is associated with optimal compliance and data quality when implemented appropriately. As lower agreement was associated with dissatisfaction and longer times per entry, this indicates there may have been issues with ePRO implementation or instrument selection. Proper implementation planning should include appropriate ePRO mode/instrument selection, ensuring ease of use while keeping patient burden low and satisfaction high.

PIH63

IMPLEMENTATION OF AN AMBULATORY PHARMACIST-MANAGED ANTICOAGULATION CLINIC IN QATAR: DEVELOPMENT OF A NEW SERVICE AND A PILOT ON PATIENTS' SATISFACTION AND QUALITY OF LIFE

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OBJECTIVES: Pharmacist-managed anticoagulation clinics have been shown to improve the quality of life (QoL) of patients receiving anti-clot treatment. The first pharmacist-managed anticoagulation clinic in Qatar was established at Al-Wakrah Hospital in March 2013. This study aims to report the development of a new pharmacist-managed service and to determine the patients' satisfaction with the new service and their overall QoL using a validated instrument called Duke Anticoagulation Satisfaction Scale (DASS). **METHODS:** A new pharmacist-managed anticoagulation clinic was successfully develop through agreements with physicians on the scope of the service. A prospective cross-sectional study using 25-item DASS QoL instrument was conducted at the Anticoagulation Clinic of Al-Wakra Hospital. An Arabic-translated version of the tool that was conceptually equivalent to the original English version was developed through linguistic validation and cultural adaptation processes. Each item was assessed using a 7-item Likert-type scale with lower values indicating a better QoL and greater satisfaction. The primary outcome measures were QoL and satisfaction. **RESULTS:** Of the 50 patients attending the anticoagulation clinic, 25 consented to participate in the study. The mean total QoL score of the population was 66±24 (range 34-118), indicating modest QoL. Male patients reported a better QoL than female patients (61.7 ± 19.5 vs. 73.3 ± 30.7; p=0.255). Furthermore, participants who were naïve to anticoagulation treatment showed better QoL compared to non-naïve participants (61.3±22.3 vs. 80.3±26.0; p=0.093). However, these differences did not reach statistical significance. **CONCLUSIONS:** Patients receiving anticoagulation service managed by pharmacists in Qatar have expressed satisfaction with the service and a modest QoL that was comparable to what has been reported in the literature. Additional studies with larger samples are required to further document the value of the new service.

PIH64

FAMILY PREFERENCES IN THE VOLUME VERSUS OUTCOME DEBATE: IMPLICATIONS FOR THE DELIVERY OF COMPLEX PEDIATRIC CARE

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OBJECTIVES: A Relationship between volume and outcome for complex medical procedures has been used as an argument for regionalization; however, this must be balanced against preferences to have care delivered close to home. The objective of our study was to determine how families trade-off variations in risk against the ability to have complex pediatric care delivered locally. **METHODS:** Twenty parents of children without serious medical problems seen in an outpatient clinic participated in a probability trade-off experiment involving two scenarios in which they were asked to imagine their child required a complex medical procedure ('low-risk'=5% mortality, 'high-risk'=30% mortality) available locally or at an alternate large center 2.5 hours away by air. Numeric and graphic representations of mortality risk were reduced in a stepwise fashion for procedures performed at the alternate center. Thresholds at which participants chose to travel were identified. Participant's decisions were then challenged by increasing the costs incurred by travelling to the alternate center. **RESULTS:** In the low-risk scenario, participants chose not to travel until absolute risk was reduced by 2±0.2% (relative risk reduction of 39±3%). In the high-risk scenario, a larger absolute risk reduction (5.1±0.8%, p=0.0001) but smaller relative risk reduction (17±3%, p=0.0001) triggered a decision to travel. In the low-risk scenario, only 2 of 8 participants with household income > $100,000/yr changed their decision to travel when faced with additional costs; however 8 of 12 with lower income changed their decision (p=0.07). In the high-risk scenario, 1 of 8 in the high income group changed their decision compared to 7 of 12 in the low income group (p=0.04). **CONCLUSIONS:** Many families would trade substantially higher risk to have complex pediatric care delivered locally. These results have implications for policy development related to delivery of complex care at smaller children's hospitals located far from large urban centers.

PIH65

EVALUATING PREVALENCE OF SELF-MEDICATION IN BAHAWALPUR

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OBJECTIVES: Aim of this study was to determine the prevalence and pattern of self-medication among different classes in Bahawalpur community **METHODS:** It was a cross-sectional descriptive study targeting residents of Bahawalpur including almost every class and gender. Sample size was calculated and 10% was added to encounter non response, respondents were selected through convenience sampling method. The data was collected using a pre-tested self-administered questionnaire. The data collection tool was tested and restructured after a pilot study on a small number (10% of the calculated sample) of population was tested and re-structured. The data was analyzed using SPSS version 15 and the results were tabulated **RESULTS:** A total 420 of the participants responded including literate 280 (66%) illiterate 140 (33%). Most of the respondents were motivated towards self-medication due to high cost of prescription medicines (n=312; 74.3%), weak trust on physicians (n=404; 96.2%) and drug sellers (n=217; 51.7%). Significantly high percentage of medical professionals (n=111,77.6%; p=008) had opinion that self-medication gives desired results as compare to respondents with no-medical background (n=180; 65%). **CONCLUSIONS:** It was concluded that self-medication is common among the residents of Bahawalpur and prevails more among literate and medical health care professionals as compare to illiterate and those not with medical background.

PIH66

A SYSTEMATIC REVIEW TO IDENTIFY THE USE OF PREFERENCE ELICITATION METHODS IN HEALTH CARE DECISION MAKING

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OBJECTIVES: Preference elicitation methods (PEMs) offer the potential to increase patient-centered medical decision-making (MDM), by offering a measure of benefit along with a measure of value. Preferences can be applied in decisions on: reimbursement, including health technology assessment (HTA); market access, including benefit-risk assessment (BRA), and clinical care. The three decision contexts have different requirements for use and elicitation of preferences. The aim of this systematic review was to identify studies that used PEMs to represent the patient view and identify the types of health care decisions addressed by PEMs. Additionally, PEMs were described by methodological and practical characteristics within the three contexts' requirements. **METHODS:** Search terms included those related to MDM and patient preferences. Only articles with original data from quantitative PEMs were included. **RESULTS:** Articles (n=322) selected included 379 PEMs, comprising matching methods (MM) (n=71, 18.7%), discrete choice experiments (DCE) (n=96, 25.3%), multi-criteria decision analysis (n=12, 3.2%), and other methods (i. e. rating scales), which provide estimates inconsistent with utility theory (n=200, 52.8%). Most publications of PEMs had an intended use for clinical decisions (n=134, 40%), HTA (n=68, 20%), or BRA (n=12, 4%). However, many did not specify an intended use (n=156, 41.1%). In clinical decisions, rating, ranking, visual analogue scales and direct choice are used most often. In HTA, DCEs and MM are both used frequently, and the elicitation of preferences in BRA was limited to DCEs. **CONCLUSIONS:** Relatively simple preference methods are often adequate in clinical decisions, because they are easy to administer, give fast results, place low cognitive burden on the patient, and low analytical burden on the provider. MM and DCE fulfill the requirements of HTA and BRA but are more complex for the respondents. There were no PEMs that had low cognitive burden, and strong methodological underpinnings which could deliver adequate information to inform HTA and BRA decisions.